

REMARKS

In the Office Action, claims 1-35 were rejected. More specifically:

- Claims 1, 3-5, 7-18 and 29 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 7,103,200 (Hillhouse);
- Claims 1, 2, 6, 16, 19-24, 27 and 31-35 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication No. 2004/0086157 (Sukegawa);
- Claims 16, 29 and 30 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,928,547 (Brown);
- Claims 16, 18-20, 25 and 26 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,853,739 (Kyle); and
- Claim 28 was rejected under 35 U.S.C. §103(a) as being unpatentable over Sukegawa in view of U.S. Patent No. 6,397,198 (Hoffman).

Applicants have cancelled claims 2, 3, 6-8, 11, 19, 20, 27 and 33 without prejudice.

Applicants have further amended claims 1, 4, 5, 10, 16, 21-25, 28 and 31.

The amendment to claim 1 and 16 find support in original claims 19, 20 and 27. The amendments to claims 4 and 5 have been made to correct the dependency of such claims based on the amendment to claim 1. The amendments to claims 10 and 11 correct the dependency of such claims based on the amendment to claim 1. The amendments to claims 21-25 have been made to correct the dependency of such claims based on the cancellation of claim 20. The amendment to claim 28 has been made to correct the dependency of claim 28 based on the cancellation of claim 27. The amendment to claim 31 finds support in original claim 33.

Upon entry of this Amendment and Response, claims 1, 4, 5, 9, 10, 12-18, 21-26, 28-32, 34 and 35 will remain pending. For the reasons set forth hereinbelow, Applicants respectfully request that the rejections associated with the pending claims be withdrawn.

Claims 1, 4, 5, 9, 10 and 12-15

Applicants submit that amended independent claim 1 is not anticipated by Hillhouse, Sukegawa, Brown or Kyle because each of Hillhouse, Sukegawa, Brown and Kyle fails to disclose each and every element of amended claim 1. *See* MPEP §2131 (stating that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or

inherently described, in the single prior art reference). More particularly, Applicants submit that each of Hillhouse, Sukegawa, Brown and Kyle fails to disclose, among other things, “generating upgraded biometric data based on a combination of biometric data associated with said user record received from a second biometric device and said received biometric data [from a first biometric device] if the first biometric device is of a higher quality than the second biometric device,” as required by claim 1.

Hillhouse discloses a method of authenticating a user using biometric input information. *See* Hillhouse at Abstract. When a user is identified, the user’s biometric information is automatically stored for use in subsequent user identification attempts as a template. *See id.* An original user template is stored permanently, but automatically stored templates are replaced at intervals. *See id.*

Claim 1, as amended, requires determining whether the first biometric device is of a higher quality than the second biometric device. Hillhouse teaches updating biometric templates based on a time at which such templates were received. *See id.* at 6:49-67. Older templates are replaced with newer templates when a time interval elapses. *See id.* at 6:56-59. Hillhouse does not teach updating biometric information based on the quality of a device from which biometric data is received.

Sukegawa discloses a person recognizing apparatus that receives a face image of a person through a camera and compares the input face image with registered information stored in memory. *See* Sukegawa at Abstract. Sukegawa further discloses updating information stored in the memory based on whether the face image is within a prescribed updating range. *See id.*

Claim 1, as amended, requires determining whether the first biometric device is of a higher quality than the second biometric device. In other words, biometric data is only updated if the device from which the sample was received is of a higher quality than the device from which the presently stored data was received. Sukegawa merely teaches updating face image information stored in memory based on whether the input data falls within a prescribed range. *See id.* Sukegawa does not teach evaluating the quality of biometric data based on a device from which it is received.

Brown discloses a rule based biometric user authentication method and system. *See* Brown at Abstract. Brown discloses an update function that enables data found in an authentication database for a primary and/or secondary key to be updated. *See id.* at 9:53-55. However, Brown differentiates the keys from biometric data. *See id.* at 7:11-19. As such, Brown does not teach updating biometric data.

Moreover, Brown does not teach or disclose determining whether the first biometric device is of a higher quality than the second biometric device. Claim 1, as amended, requires determining whether a first biometric device is of a higher quality than a second biometric device. Brown does not discuss comparing the quality of biometric devices for any purpose. In particular, Brown does not discuss comparing the quality of biometric devices to determine whether to combine biometric information.

Kyle discloses a security system that utilizes an identity verification system having a biometrics component. *See* Kyle at Abstract. Kyle discloses that the system permits an administrator to update image templates during registration. *See id.* at 13:50-52. Similarly, Kyle discloses that an enrollment operator can choose to accept images or replace poor quality images during enrollment. *See id.* at 13:31-33. Kyle does not discuss determining a quality of an image based on biometric device data.

In contrast, claim 1, as amended, requires determining whether the first biometric device is of a higher quality than the second biometric device. Kyle does not discuss comparing the quality of biometric devices for any purpose. Kyle merely discloses updating an image if an operator perceives that the image is of low quality.

Therefore, for at least the reasons set forth hereinabove, Applicants submit that claim 1 is allowable over the Examiner-cited prior art. *See* MPEP §2131. Because claims 4, 5, 9, 10 and 12-15 depend from and incorporate all of the limitations of allowable independent claim 1, Applicants submit that claims 4, 5, 9, 10 and 12-15 are likewise allowable over the Examiner-cited prior art. Accordingly, Applicants respectfully request that the rejections associated with claims 1, 4, 5, 9, 10 and 12-15 be withdrawn.

Claims 16-18, 21-26 and 28-30

Applicants submit that amended independent claim 16 is not anticipated by Hillhouse, Sukegawa, Brown or Kyle because each of Hillhouse, Sukegawa, Brown and Kyle fails to disclose each and every element of amended claim 16. *See* MPEP §2131. More particularly, Applicants submit that each of Hillhouse, Sukegawa, Brown and Kyle fails to disclose, among other things, “determining whether said first biometric data is of a higher quality than said second biometric data, wherein the quality of each of said first biometric data and said second biometric data is determined at least by **biometric device data**,” as required by claim 16.

Hillhouse discloses a method of authenticating a user using biometric input information. *See* Hillhouse at Abstract. When a user is identified, the user’s biometric information is automatically stored for use in subsequent user identification attempts as a template. *See id.* Original templates are permanent, but automatically stored templates are replaced at intervals. *See id.*

Claim 16, as amended, requires determining whether first biometric data is of a higher quality than second biometric data based on at least biometric device data. Hillhouse teaches updating biometric templates based on a time at which such templates were received. *See id.* at 6:49-67. Older templates are replaced with newer templates when a time interval elapses. *See id.* at 6:56-59. Hillhouse does not teach evaluating the quality of biometric data based on a device from which it is received.

Sukegawa discloses a person recognizing apparatus that receives a face image of a person through a camera and compares the input face image with registered information stored in memory. *See* Sukegawa at Abstract. Sukegawa further discloses updating information stored in the memory based on whether the face image is within a prescribed updating range. *See id.*

Claim 16, as amended, requires determining whether first biometric data is of a higher quality than second biometric data based on at least biometric device data. In other words, the quality of each biometric sample depends upon the type of device from which the sample was received. Sukegawa merely teaches updating face image information stored in memory based on whether the input data falls within a prescribed range. *See id.* Sukegawa does not teach evaluating the quality of biometric data based on a device from which it is received.

Brown discloses a rule based biometric user authentication method and system. *See* Brown at Abstract. Brown discloses an update function that enables data found in an authentication database for a primary and/or secondary key to be updated. *See id.* at 9:53-55. However, Brown differentiates the keys from biometric data. *See id.* at 7:11-19. As such, Brown does not teach updating biometric data.

Moreover, Brown does not teach or disclose determining or comparing the quality of biometric data. Furthermore, Brown does not teach or disclose determining the quality of biometric data based on at least biometric device data. Claim 16, as amended, requires determining whether first biometric data is of a higher quality than second biometric data based on at least biometric device data. Brown does not discuss using biometric device data for any purpose. In particular, Brown does not discuss using biometric device data to determine the quality of biometric data.

Kyle discloses a security system that utilizes an identity verification system having a biometrics component. *See* Kyle at Abstract. Kyle discloses that the system permits an administrator to update image templates during registration. *See id.* at 13:50-52. Similarly, Kyle discloses that an enrollment operator can choose to accept images or replace poor quality images during enrollment. *See id.* at 13:31-33. Kyle does not discuss determining a quality of an image based on biometric device data.

In contrast, claim 16, as amended, requires determining whether first biometric data is of a higher quality than second biometric data based on at least biometric device data. Kyle does not discuss using biometric device data for any purpose. Kyle merely discloses updating an image if an operator perceives that the image is of low quality.

Therefore, for at least the reasons set forth hereinabove, Applicants submit that claim 16 is allowable over the Examiner-cited prior art. *See* MPEP §2131. Because claims 17, 18, 21-26 and 28-30 depend from and incorporate all of the limitations of allowable independent claim 16, Applicants submit that claims 17, 18, 21-26 and 28-30 are likewise allowable over the Examiner-cited prior art. Accordingly, Applicants respectfully request that the rejections associated with claims 16-18, 21-26 and 28-30 be withdrawn.

Claims 31, 32, 34 and 35

In addition, Applicants submit that amended independent claim 31 is not anticipated by Sukegawa because Sukegawa fails to disclose each and every element of amended claim 31. *See* MPEP §2131. More particularly, Applicants submit that Sukegawa fails to disclose, among other things, “determining whether said received biometric data is useful to upgrade said second biometric data, wherein said determining is based on **a quality of said local biometric device,**” as required by claim 31.

Sukegawa discloses a person recognizing apparatus that receives a face image of a person through a camera and compares the input face image with registered information stored in memory. *See* Sukegawa at Abstract. Sukegawa further discloses updating information stored in the memory based on whether the face image is within a prescribed updating range. *See id.*

Claim 31, as amended, requires determining whether received biometric data is useful to upgrade second biometric data based on a quality of a biometric device. In other words, the quality of the biometric data is determined upon the type of device from which the data was received. Sukegawa merely teaches updating face image information stored in memory based on whether the input data falls within a prescribed range. *See id.* Sukegawa does not teach evaluating the quality of biometric data based on a device from which it is received.

Therefore, for at least the reasons set forth hereinabove, Applicants submit that claim 31 is allowable over the Examiner-cited prior art. *See* MPEP §2131. Because claims 32, 34 and 35 depend from and incorporate all of the limitations of allowable independent claim 31, Applicants submit that claims 32, 34 and 35 are likewise allowable over the Examiner-cited prior art. Accordingly, Applicants respectfully request that the rejections associated with claims 31, 32, 34 and 35 be withdrawn.

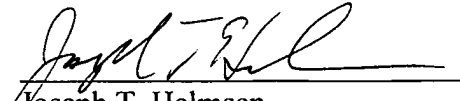
All of the stated grounds of rejection have been properly traversed, accommodated or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. There being no other rejections, Applicants respectfully request that the current application be allowed and passed to issue.

If the Examiner believes for any reason that personal communication will expedite prosecution of this application, I invite the Examiner to telephone me directly.

AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment and Response, or credit any overpayment, to deposit account no. 50-0436.

Respectfully submitted,
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